

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-16 (Canceled).

Claim 17 (Currently Amended): A method for the synthesis of a phosphorus compound, comprising:

~~forming an acid during said synthesis;~~

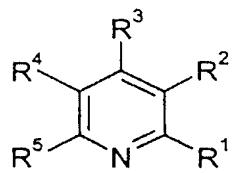
reacting said (i) an acid liberated during said synthesis and (ii) an auxiliary base to form a salt of the auxiliary base; said salt being liquid at temperatures at which the phosphorus compound is not significantly decomposed during the process of separating off the liquid salt;

forming two immiscible liquid phases, a first phase comprising said salt of the auxiliary base and a second phase comprising said phosphorus compound or a solution of said phosphorus compound in a solvent; and

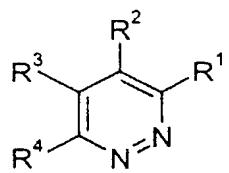
separating said first phase from said second phase;

wherein said phosphorus compound is selected from the group consisting of aminodihalophosphines, diaminohalophosphines, triaminophosphines, phosphorous ester diamides, aminophosphines, diaminophosphines, phosphorous ester amide halides, aminophosphine halides and phosphonous ester halides;

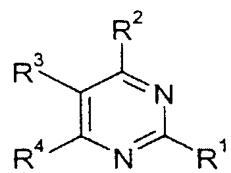
wherein the base used is selected from the group consisting of compounds of the formulae (Ia) to (Ir),



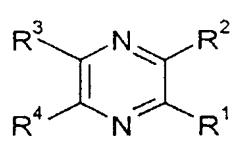
(a)



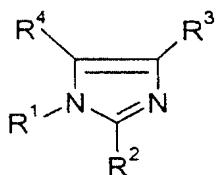
(b)



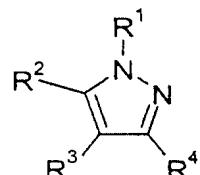
(c)



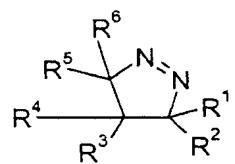
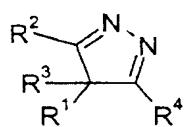
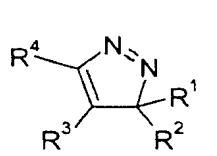
(d)



(e)



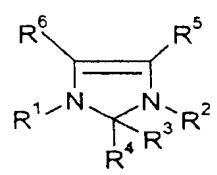
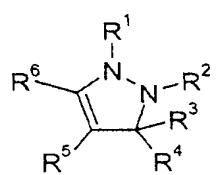
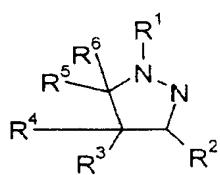
(f)



(g)

(h)

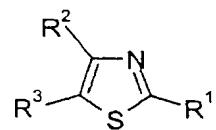
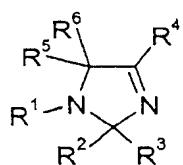
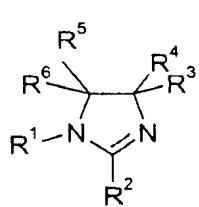
(i)



(j)

(k)

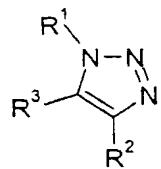
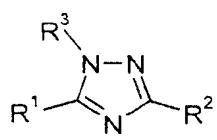
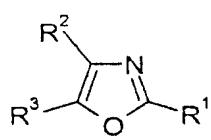
(l)



(m)

(n)

(o)



(p)

(q)

(r)

wherein

R¹, R², R³, R⁴, R⁵ and R⁶ are each, independently of one another, hydrogen, C₁-C₁₈-alkyl, C₂-C₁₈-alkyl which may be interrupted by one or more oxygen and/or sulfur atoms and/or one or more substituted or unsubstituted imino groups, C₆-C₁₂-aryl, C₅-C₁₂-cycloalkyl

or a five- to six-membered, oxygen, nitrogen- and/or sulfur-containing heterocycle, wherein each of the abovementioned radicals may be substituted by functional groups, aryl, alkyl, aryloxy, alkyloxy, halogen, heteroatoms and/or heterocycles.

Claim 18 (Previously Presented): The method as claimed in claim 17, wherein the salt of the auxiliary base has a melting point below 160°C.

Claim 19 (Previously Presented): The method as claimed in claim 17, wherein the salt of the auxiliary base has an $E_T(30)$ of more than 35.

Claim 20 (Previously Presented): The method as claimed in claim 17, wherein the base contains at least one nitrogen atom.

Claim 21 (Canceled):

Claim 22 (Previously Presented): The method as claimed in claim 17, wherein the auxiliary base is 1-n-butylimidazole, 1-methylimidazole, 2-methylpyridine or 2-ethylpyridine.

Claim 23 (Previously Presented): The method as claimed in claim 17, wherein the auxiliary base is di-n-butyl-n-pentylamine or 1,5-diazabicyclo[4.3.0]non-5-ene (DBN).

Claim 24 (Previously Presented): The method as claimed in claim 17, wherein the salt of the auxiliary base is soluble to an extent of less than 20% by weight in the desired product or in the solution of the desired product in a suitable solvent.

Claim 25 (Previously Presented): The method as claimed in claim 17, wherein diphosphorous diester amides ($[N](R'O)P-O-Z-O-P[N'](OR'')$), diphosphorous ester diamides ($[N][N']P-O-Z-O-P[N''][N'']$), bistriaminophosphines ($[N][N']P-[N'']-Z-[N'']-P[N'']-[N'']$), or systems of the formula $[N](R'O)P-O-Z-O-P(OR'')(OR'')$, $[N][N']P-O-Z-O-P(OR'')(OR'')$ or $[N][N']P-O-Z-O-P[N''](OR'')$ or systems which are both nitrogen- and carbon-substituted on each phosphorus and have the formula $[N](R')P-O-Z-O-P[N'](R'')$ or $[N](R')P-[N'']-Z-[N'']-P[N'](R'')$ or systems of the formula $[N](R'O)P-O-Z-O-P[N'](R'')$ are prepared, wherein R , R' , R'' and R''' can be any organic radicals which may be identical or different, $[N]$, $[N']$, $[N'']$, $[N'']$, $[N'']$ and $[N'']$ are unsubstituted, monosubstituted or disubstituted amino groups which may be identical or different and Z can be any divalent bridge.

Claim 26 (Previously Presented): The method for preparing phosphorus compounds as set forth in claim 17, wherein the preparation is carried out continuously at from 30°C to 190°C and a residence time of from 1 second to 1 hour.

Claims 27-29 (Canceled):